



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,537	10/21/2003	Minoru Taneda	031235	9326

23850 7590 09/22/2006

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

DOAN, KIET M

ART UNIT PAPER NUMBER

2617

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/689,537

Applicant(s)

TANEDA ET AL.

Examiner

Kiet Doan

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/06/2006 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray (Patent No. 6,011,699) in view of Kubo et al. (Patent No. 6,633,749).

Claim 1. Murray teaches a portable terminal device of the foldable type (Fig.1 and fig.2 Illustrate portable terminal device of the foldable type) comprising a pair of flat cabinets openably connected to each other by a hinge mechanism, each of the cabinets comprising a front cabinet half segment to be opposed to the other cabinet when closed and a rear cabinet half segment joined to the front cabinet half segment, said front cabinet half segment being a separate piece from said rear cabinet half segment (Abstract, C4, Lines 10-14, 26-28, 36-38, 44, 63 and C5, L23-31. Fig.2, Illustrate No.102

Art Unit: 2617

top housing wherein contain pair of flat cabinet as back portion 104 and front portion 106 as further illustrate in Fig.3 and Fig.4 showing detail of front half segment read on No.106 being separated piece said from rear cabinet half segment read on No.104 wherein connected to the hinge mechanism 210 is created in the joint between the front cabinet half segment and rear cabinet half segment of either of the pair of cabinets).

Murray teaches the limitation of claim **but silent on** one of the pair of cabinets having the front cabinet half segment thereof connected at an end portion thereof to the hinge mechanism and having the rear cabinet half segment thereof engaged with the front cabinet half segment thereof, the other cabinet having the rear cabinet half segment thereof connected at an end portion thereof to the hinge mechanism and having the front cabinet half segment thereof engaged with the rear cabinet half segment thereof,

such that when the pair of cabinets are closed with extraneous matter there between, no clearance is created in the joint between the front cabinet half segment and rear cabinet half segment of either of the pair of cabinets.

In an analogous art, Kubo teaches " Folding mobile wireless device". Further, **Kubo teaches** one of the pair of cabinets having the front cabinet half segment thereof connected at an end portion thereof to the hinge mechanism and having the rear cabinet half segment thereof engaged with the front cabinet half segment thereof, the other cabinet having the rear cabinet half segment thereof connected at an end portion thereof to the hinge mechanism and having the front cabinet half segment thereof engaged with the rear cabinet half segment thereof,

Art Unit: 2617

such that when the pair of cabinets are closed with extraneous matter there between, no clearance is created in the joint between the front cabinet half segment and rear cabinet half segment of either of the pair of cabinets (Abstract, C1, L51-62, C2, L18-33, C3, L42-54, Examiner consider pair of cabinet which read on No.10 and No.20 wherein connected end portion to the hinge mechanism No.30 and further Fig.2 Illustrate as read on pair of cabinets are closed and no clearance is created in the joint between the front cabinet half segment and rear cabinet half segment of either of the pair of cabinets).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Murray and Kubo system, such that a portable terminal device of the foldable type having a pair of flat cabinets each of the cabinets comprising a front half segment and rear half segment wherein connected through hinge to provide means for forming strength connection of half segment portion.

Consider **claim 2**. Kudo teaches a portable terminal device of the foldable type according to claim 1 wherein one of the pair of flat cabinets is a manipulation-side cabinet provided with a plurality of manual keys (Fig.1a, Illustrate No. 24 as cabinet provided with a plurality of manual keys), and the other cabinet is a display-side cabinet provided with a display, the front cabinet segment of the manipulation-side cabinet and the rear cabinet segment of the display-side cabinet being connected to each other by the hinge mechanism (Fig.1a, Illustrate No.14 as the other cabinet is a display-side

wherein the rear cabinet segment of the display-side cabinet being connected to each other by the hinge mechanism No.30).

Consider **claim 3**. Kubo teaches a portable terminal device of the foldable type according to claim 1 wherein the front cabinet segment of the manipulation-side cabinet is provided with a pair of annular pieces projecting from one end thereof and spaced apart from each other, and the rear cabinet segment of the display-side cabinet is provided with a pair of annular pieces projecting from one end thereof and spaced apart from each other, the annular piece of the manipulation-side cabinet and the annular piece of the display-side cabinet being arranged side by side in contact with each other and have fitted therein a first hinge unit, the other annular piece of the manipulation-side cabinet and the other annular piece of the display-side cabinet being arranged side by side in contact with each other and have fitted therein a second hinge unit. (Fig.1a, Illustrate as pair of annular pieces wherein spaced apart from each other and contact with each other and have fitted therein a first/second hinge unit as read on No.32).

Consider **claim 4**. Kubo teaches a portable terminal device of the foldable type according to claim 3 wherein the front cabinet segment of the manipulation-side cabinet has a circular-arc piece projecting from the end thereof and positioned between the pair of annular pieces, and the rear cabinet segment of the manipulation-side cabinet is provided at one end thereof with a partial member joined to the circular-arc piece for

Art Unit: 2617

forming a hollow cylinder (C5, L2-35, Fig.3a, Illustrate as cabinet has a circular-arc which forming a hollow cylinder, No.30a as pair of annular pieces).

Consider **claim 5**, Kubo teaches a portable terminal device of the foldable type according to claim 3 wherein the front cabinet segment of the display-side cabinet is provided with a projecting circular-arc piece positioned between the pair of annular pieces, and the rear cabinet segment of the display-side cabinet is provided at the end thereof with a partial member joined to the circular-arc piece for forming a hollow cylinder (C5, L2-35, Fig.31, Illustrate as cabinet of the display-side has a circular-arc, No.31a/b as pair of annular pieces).

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray (Patent No. 6,011,699) in view of Kubo et al. (Patent No. 6,633,749) and further view of Frohlund et al. (Patent No. 6,421,547).

Consider **claims 6 and 7**. Murray and Kubo teach the limitation of claims as discuss **above but fail to teach** a portable terminal device of the foldable type according to claim 4 wherein a circuit board in the manipulation-side cabinet and a display in the display-side cabinet are connected to each other by a flexible lead, and the flexible lead is helically wound inside the hollow cylinders formed by the circular-arc pieces and the partial members.

In an analogous art, Frohlund teaches "Arrangement at a mobile telephone". Further, Frohlund teaches a portable terminal device of the foldable type according to claim 4 wherein a circuit board in the manipulation-side cabinet and a display in the display-side cabinet are connected to each other by a flexible lead (C3, L6-67, Fig.2, No.10 Illustrate as flexible lead), and the flexible lead is helically wound inside the hollow cylinders formed by the circular-arc pieces and the partial members (Fig.4, No.17 Illustrate the flexible lead is helically inside the hollow cylinders formed by the circular-arc).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Murray, Kubo and Frohlund system, such that cabinet are connected to each other by a flexible lead and helically inside the hollow cylinders formed by the circular-arc, to provide means for easy/flexibility, open/close and maintenance.

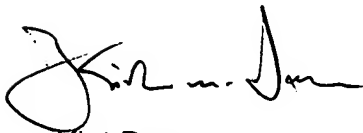
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kiet Doan
Patent Examiner

JEAN GELIN
PRIMARY EXAMINER

